

Stewardship Science Academic Alliances Program

List of Grantees

Title	Principal University
<i>Centers of Excellence</i>	
Center for the Study of Pulsed-Power-Driven High Energy Density Plasmas	Cornell University
The Texas Center for High Intensity laser Science	University of Texas -Austin
Center of Excellence for High Pressure Science and Technology	Carnegie Institution of Washington
Center of Excellence for Radioactive Ion Beam Studies for Stewardship Science	Rutgers University
<i>Research Grants</i>	
Electron Interactions in Actinides and Related Systems under Extreme Conditions	Florida State University
Development of Designer Diamond Anvil Technology for High Pressure-High Temperature Experiments in Support of the Stockpile Stewardship Program	University of Alabama – Birmingham
Experimental Investigation of Magnetic, Superconducting, and Other Phase Transitions in Novel f-Electron Materials at Ultra-high pressures Using Designer Diamond Anvils	University of California – San Diego
Micro- and Nano- Structure Development and Multiscale Physics at Sliding Metal Interfaces	The Ohio State University
Microstructures and properties of materials under repeated laser irradiation	University of Illinois – Urbana/Champaign
High-Pressure Thermodynamic Properties of f-Electron Metals, Transition Metal Oxides, and Half-Metallic Magnets	University of California - Davis
Determining the Mechanical Constitutive Properties of Metals as a Function of Strain Rate and Temperature: A Combined Experimental and Modeling Approach	University of Illinois – Urbana/Champaign
Investigation of the Rayleigh-Taylor and Richtmyer-Meshkov Instabilities	University of Wisconsin – Madison
Continuation of the Application of Parallel PIC Simulations to Laser and Electron Transport Through Plasmas Under Conditions Relevant to ICF and SBSS	University of California - Los Angeles
Coherent Imaging of Laser Plasma Interactions using XUV High Harmonic Radiation	University of Colorado – Boulder
Studies of the Nonlinear Interactions between Optical-Mixing-Controlled Stimulated Scattering Instabilities in Laser-Produced Plasmas	Polymath Research Inc.
Detailed Measurements of Turbulent Rayleigh-Taylor Mixing at Large and Small Atwood Numbers	Texas A&M University
Nuclear Probing of Dense Plasmas	Massachusetts Institute of Technology
Hydrodynamics and Radiative Hydrodynamics with Astrophysical Applications	University of Michigan
Dense Plasma Studies with Ultra-bright soft X-Ray Laser Probes	Colorado State University
Measurements of Neutron-induced Reaction Cross Sections	Duke University
Studies in Low Energy Nuclear Science	Ohio University

Neutron Capture Experiments on Unstable Nuclei	University of California - Berkeley
Nuclear Level Densities and γ -Ray Strength Functions	North Carolina State University
Proton Radiography: Cross Section Measurements and Prototype Detector Development	University of Michigan
Nuclear Reaction Measurements with Radioactive Beams and Targets	University of California - Berkeley
Measurements of the Energy, Mass, Charge and Angular Distribution of Fission Fragments as a Function of Energy Using a Lead Slowing Down Spectrometer	Rensselaer Polytechnic Institute
Measurement of Fission Neutron Multiplicities and Energy Spectra for Actinide Nuclei	Oregon State University
Nuclear Stewardship Research	University of Richmond (formerly at Yale University)
Nuclear Level Densities for Modeling Nuclear Reactions: An efficient Approach Using Statistical Spectroscopy	San Diego State University Foundation
Theoretical Description of the Fission Process	University of Tennessee
Fundamental Issues in the Interaction of Intense lasers with Plasma	Princeton University
Comprehensive Modeling of Laser-Plasma Interaction Relevant to the NIF Ignition Program and the NIF-Based Stockpile Stewardship Program	University of California - San Diego
An Experimental Study of the Turbulent Development of Rayleigh-Taylor and Richtmyer-Meshkov Instabilities	University of Arizona
Mutual Interactions Between Finite Laser Beams in Plasmas	University of California – Los Angeles